



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/628,726	07/28/2000	TORU ITOH	106879	3339

25944 7590 10/03/2003

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/628,726	ITOH ET AL.	
	Examiner	Art Unit	
	Victor S Chang	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner has carefully considered Applicant's amendments and remarks filed on 8/8/2003. Applicant's amendments to claim 1 and cancellation of claims 2-4 and 6-11 have all been entered. Also, Applicants argument that claim 5 depends from claim 1 and therefore should be included in Group I is persuasive, as such, claim 5 is now rejoined with Group I as an elected claim.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Claim Rejections - 35 USC § 112

4. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Despite the extensive revisions, the Examiner notes that the claim(s) are narrative in form and still replete with indefinite and functional or operational language. For example:

In claim 1, line 2, the Examiner suggests to change "plastic core members" to -- plastic members--, so as to remove the confusion that Applicants seem to redefine the core element. Similar change should be made at line 11.

Art Unit: 1771

In claim 1, lines 3-4, the Examiner notes that the newly added wherein clause appears unnecessary, since the phrase "closed-cell foam plastic material" appears to be a well defined element in the Specification. Also the Examiner notes that the phrase "has a plastic material and foams within the plastic material" appears vague, indefinite and confusing. Please at least change "has" to --having--, and also clarify the term "foams" as a noun or verb, i.e., an element or a step.

In claim 1, line 6, the phrase "opposite surfaces" lacks antecedent basis.

In claim 1, the last two lines "the first adhesive films and the second adhesive films are different adhesive films from each other" appears to be unnecessary, since the first and second adhesive films have already been defined above. Also, it is unclear what is the scope of the term "different", or what is "different".

In claim 5, line 1, the phrase "to be used as" is clearly improper, i.e., the claim recites a use without setting forth any steps involved in the process, and results in an improper definition of a process.

Response to Amendment

5. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Scoles et al. (US 5916469), substantially for the reasons set forth in section 6 of Paper No. 18, together with the following additional observations.

With respect to Applicants' Response arguing that "Scoles discloses a foam core used for holding a Z-pin. The foam core of Scoles is not a structural member ..."

Art Unit: 1771

(Remarks, page 4, first full paragraph), the Examiner repeats (see Paper No. 18, page 3) that Scoles expressly teaches that it is known that composite sandwich structures having resin matrix skins or face sheets adhered to a honeycomb or foam core are used in aerospace, automotive, and marine applications for primary and secondary structure. Further, Scoles teaches that it is known that adhesive is used to bond the face sheets to the foam (column 9, line 35). As such, Scoles clearly teaches that the foam core forms a structural member, and adhesive is a means to assemble the foam core to form the structural member, Applicants' argument to the contrary notwithstanding.

Applicants' statement that "Maruyama discloses an aqueous sizing agent ..." (Remarks, page 4, second full paragraph) is not understood. The Examiner notes that Maruyama is not a prior reference in the prior Office action Paper No. 18.

With respect to Applicants' argument that "Day fails to teach or suggest the foam plastic core members being bonded together on a side where the foam plastic core members face each other with non-foaming adhesive films. Nor does Day teach or suggest bonding the surface plates to the core with non-carrier adhesive films ..."

(Remarks, page 4, third paragraph), the Examiner repeats (see Paper No. 18, page 4) that Day expressly teaches that the core panels are adhesively bonded between skins of rigid sheet materials to form laminated sandwich panels with the fibrous strips connecting the skins, and adhesive or resin, such as polyurethane or polyester resin which maintains its strength and stiffness, is selected to stiffen and/or waterproof and/or fireproof.

Art Unit: 1771

With respect to Applicants' argument that "there is no motivation shown to modify Scoles or to combine its teachings with those of Day" (Remarks, page 4, bottom paragraph), the Examiner repeats (see Paper No. 18, page 4) that in the absence of unexpected results, it would have been obvious to one skilled in the art to select a suitable non-foaming carrier-free adhesive to make a composite sandwich structure, motivated by the desire to maintain the strength and stiffness of the structure, as taught by Day.

Finally, for the rejoined claim 5, the Examiner notes that Scoles expressly teaches that the composite sandwich structure is used in aerospace, automotive and marine applications, as set forth above.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1771

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP 1900-
1700

Daniel Zinker